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ABSTRACT

This study explored the possibility that family organization may moderate the impact of stressful events experienced in the home on adolescents' functioning. Participants were 80 African-American adolescents and their mothers in a large northeastern city. (47 one-parent and 33 two-parent families). A factor analysis was used to measure "stressful life events," forming scales in four areas: family disruption; work-related stress; health problems; and relationship problems. Findings reveal that the more that families experienced disruption and the more that mothers reported health problems, the lower the self-reliance and self-esteem of the adolescents. Mothers' health problems were also linked to an increase in adolescents' problem behavior and psychological distress. Findings also revealed some of the moderating effects of family organization on the association of stressful events with adolescent adjustment. In homes high in organization, an increase in disruption was associated with lower psychological distress, while in homes low in organization increases in disruption were associated with an increase in psychological distress. In highly organized homes, the stability and structure of the family environment may offset the impact of disruptive experiences. Some limitations of this research are discussed. (Contains 2 tables and 28 references.) (SLD)

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Laboratory for Student Success

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The Mid-Atlantic Regional Educational Laboratory at Temple University
Center for Research in Human Development and Education

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The research reported herein is supported in part by the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education through a grant to the Laboratory for Student Success (LSS), the Mid-Atlantic Regional Educational Laboratory at Temple University Center for Research in Human Development and Education (CRHDE). The opinions expressed do not necessarily reflect the position of the supporting agencies, and no official endorsement should be inferred.

Introduction

Nearly half (46%) of African-American children under 18 years of age live in poverty (Bennett, 1995). Because of their economic disadvantage, African-American families and children are likely to be exposed to a host of stressful experiences. Research has shown a positive association between economic disadvantage and negative life events (Dohrenwind, 1970). Children from low-income homes are more likely to experience stressful events such as divorce, family moves, and school transfer (Garnezy & Tellegn, 1984). Indeed, McLoyd (1990) has argued that "individuals who are poor are confronted with an unremitting succession of negative life events (e.g., eviction, physical illness, criminal assault) in the context of chronically stressful ongoing life conditions" (p. 318).

Research has shown that negative life events reported by parents were associated with children's emotional and behavioral problems (Fergusson, Horwood, Gretton, & Shannon, 1985; Holahan & Moos, 1987). For example, Holahan and Moos (1987) found that negative life events reported by parents were associated with children's psychological maladjustment and physical health problems. Also, Thomson and Vaux (1986) found a significant relation between major life events and child affective balance. Ge, Conger, Lorenz, and Simons (1994) found that stressful events reported by parents were positively associated with boys' depressed mood. This work also revealed that stressful events reported by parents were linked to depression in adolescents because parents' exposure to stressful events was associated with disruption in parents' parenting practices.

Given the level of economic disadvantage of African-American families and the association of economic disadvantage with exposure to negative life events, it is surprising that there is relatively little research on the link between negative life events reported by parents and the well-being of African-American children and adolescents. The available research has shown that mothers' unemployment was positively associated with adolescents' anxiety (McLoyd, Jayaratne, Ceballo, & Borquez, 1994). Chronic stressors such as low family income or a dangerous

living environment have also been linked to children and adolescents' adjustment. Exposure to a greater number of chronic family stressors (e.g., low family income, overcrowding, parental conflict) was linked to adolescents' internalizing and externalizing problems (Brody et al., 1994). Also, work has shown that the more negative African-American mothers' perceptions are of their neighborhood (e.g., physical deterioration, crime, lack of resources), the more their adolescents exhibited problem behavior, low self-esteem, and psychological distress (Taylor, 1997).

Moderators of Stressful Life Events

Given the shortage of research on the effects of discrete stressors on African-American adolescents, it is not surprising that there is little research on factors that may moderate or buffer the impact of stressful experiences. A possible moderator of stressful experiences explored in this study was family organization or stability. Family organization refers to the degree to which parents provide children and adolescents with a home environment that is structured, organized, and predictable. In research with younger children, family organization has been positively associated with mental test performance and children's social competence (Bradley & Caldwell, 1976; Slater & Power, 1987) and negatively associated with behavioral problems (Slater & Power, 1987). Clark (1983) has shown that family organization was a feature that differentiated high and low achieving African-American adolescents. Parents of adolescents who did well in school created a family environment in which there were daily and weekly schedules and family routines. The adolescents had regular times for events throughout the day (e.g., individuals leaving and arriving home, meals, homework, bedtime). Parents were also actively involved in the adolescents' schooling through help with homework and visits to the school. In other recent research, family organization was positively associated with African-American adolescents' school performance and self-reliance, and negatively associated with problem behaviors and psychological distress (Taylor, 1996).

In the present study we explored the possibility that family organization may moderate the impact of stressful events experienced in the home on adolescents' functioning. The effects

of stressful experiences may be offset or dampened when adolescents live in a stable and consistent home environment. It was expected that recent stressful events or experiences would be negatively associated with adolescents' adjustment. It was also predicted that evidence for the moderating effects of family organization would be revealed as stressful events would have less impact on adolescent functioning in the context of a more organized family environment.

Methods

Participants

The participants in the investigation were 80 African-American adolescents and their mothers living in a large northeastern city. The adolescents were 39 males and 41 females whose ages ranged from 14.02 to 18.40 years, with an average age of 15.57 years. Mothers had a mean age of 39.27 years. The families consisted of 47 one-parent and 33 two-parent families, and had an average income in the prior year of \$15,000 - \$20,000. The families were recruited for participation through advertisements in local community newspapers, fliers in social service agencies, local markets, and recreation centers, and through presentations at home and school associations.

Measures

Stressful life events were measured with Psychiatric Epidemiology Research Interview (PERI) Life Events Scale (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978). In the questionnaire mothers were asked to indicate whether any of 35 different events happened to them or a family member in the past year. A factor analysis of the measure was used to identify items forming scales in four areas: (a) family disruption; (b) work related stress; (c) health problems; and (d) relationship problems.

Events in the area of family disruption (7 items; $\alpha = .77$) concerned areas of difficulty or problems in the nuclear family such as a death in the family, family arguments, or the family moving to a new residence. Events in the area of work-related stress (5 items; $\alpha = .77$) concerned stress associated with work such as trouble on the job. Events in the area of health problems (5 items; $\alpha = .73$) concerned the experience of illnesses or other health problems or

physical conditions such as an injury, an accident, or an improperly treated physical illness. Events in the area of relationship problems (9 items; $\alpha = .74$) concerned negative changes or difficulties with a spouse or "significant other" (for mothers in one-parent homes), such as a break up or separation. The total score for each of the event types is the sum total of the affirmative responses (1 = yes, no = 0) for events in the cluster.

Family organization (5 questions, $\alpha = .80$) was measured with a series of questions (McCubbin, McCubbin, & Thompson, 1987) assessing the adolescents' perceptions that their family was organized around a series of routines and a clear schedule. A sample question included, "My family has certain routines that help our household run smoothly." The adolescents indicated their answers using a Likert response scale ranging from "4 = Strongly Agree" to "1 = Strongly Disagree."

Adolescent adjustment was measured in the areas of self-reliance, involvement in problem behavior, feelings of psychological distress, and self-esteem. Self-reliance (10 items, $\alpha = .85$) was measured using the Psychological Maturity Inventory (Greenberger, Josselson, Kneer, & Kneer, 1974; Greenberger & Bond, 1976). The measure assessed adolescents' lack of dependency, sense of initiative, and control over events. Sample questions that were reverse coded included: "Luck decides most of the things that happen to me," or "When I do something wrong I depend on my parents to straighten things out for me." The adolescents indicated their answers using a Likert scale ranging from "4 = Strongly Agree" to "1 = Strongly Disagree."

Problem behavior (15 items, $\alpha = .81$) was assessed by obtaining the adolescents' self-report of their frequency of involvement in delinquent activities such as physical assault, drug use, and vandalism (Gold & Reimer, 1975). The response format for the measure is a Likert scale ranging from "4 = Several Times" to "1 = Never."

Psychological distress (20 items, $\alpha = .87$) was assessed using the Center for Epidemiological Studies (CES) Depression Scale (Radloff, 1977). For this measure, the adolescents reported the frequency of mental or physical states, such as feelings of depression or

loss of appetite, etc., over the past month. The Likert scale for the measure ranged from "4 = Three or More Times" to "1 = Never."

Self-esteem (10 items, $\alpha = .95$) was assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). This scale measures the self-acceptance component of self-esteem. A sample question is: "I feel that I have a number of good qualities." The response format for the measure is a Likert scale ranging from "4 = Strongly Agree" to "1 = Strongly Disagree."

Procedure

The mothers and adolescents were interviewed in the home separately by interviewers trained in the administration of the measures. The measures typically took one hour to complete. Mothers answered questions regarding stressful events and adolescents reported on family organization and the areas of adolescent adjustment assessed.

Analysis Plan

Our conceptual model postulated that family organization would moderate the association of stressful events with adolescent adjustment. Analyses followed Baron and Kenney's (1986) recommendations for testing moderating effects. Moderating effects are tested by taking the product of the independent variable (stressful event) and the moderator (family organization). Moderator effects are indicated by the significant effect of the product term of (stressful event) x (family organization) while the effects of stressful event and family organization are controlled. Multiple regression techniques were used to conduct the analyses. Each dependent variable was regressed on stressful events, family organization, and the product term of (stressful event) x (family organization). In all of the analyses the variables, including income, family structure, and mothers' age, were included to control for their effects.

Results

Demographic Analyses

Means and standard deviations for the major variables are shown in Table 1. The association between families demographic characteristics and the major variables was assessed.

Table 1
Means and Standard Deviations of the Major Variables

Variable	Mean	Standard Deviation
Family Organization	16.48	3.24
Disruption	6.02	4.87
Work Stress	4.25	3.19
Health Problems	4.53	3.37
Relationship Problems	6.72	4.89
Income	3.05	2.31
Self-reliance	12.73	4.66
Problem Behavior	19.41	7.92
Psychological Distress	26.35	11.55
Self-esteem	24.43	3.12

Findings revealed that older mothers were less likely to report relationship problems than younger mothers ($r = -.25, p < .05$). Also, there was a positive association of family income with adolescents' self-reliance ($r = .32, p < .01$), and a negative correlation of family income with adolescents' problem behavior ($r = -.31, p < .01$).

Association of Stressful Life Events with Adolescent Adjustment

Family disruption was negatively associated with self-reliance ($\beta = -.44, p < .05$), and self-esteem ($\beta = -.52, p < .05$). Health problems experienced by the mother were negatively associated with self-reliance ($\beta = -.34, p < .05$) and self-esteem ($\beta = -.39, p < .05$) and positively linked to problem behavior ($\beta = .40, p < .05$) and psychological distress ($\beta = .34, p < .05$).

Association of Family Organization with Adolescent Adjustment

Findings revealed that family organization was positively associated with self-reliance ($\beta = .31, p < .05$) and self-esteem ($\beta = .32, p < .05$). Family organization was also negatively associated with problem behavior ($\beta = -.40, p < .05$).

Moderating Effects

Evidence of moderating effects of family organization was revealed for the effect of the interaction of family organization and disruption on psychological distress ($\beta = -1.65, p < .01$).

The relation between psychological distress and disruption for different levels (high = +1 standard deviation, low = -1 standard deviation) of family organization was then tested. As shown in Table 2, the relationship between psychological distress and disruption was significant for adolescents in homes high in organization and for those in homes that were low in organization. Thus, for adolescents in highly organized homes increases in disruption were associated with lower levels of psychological distress. In comparison, for those in homes low in organization an increase in disruption was associated with an increase in adolescents' psychological distress.

Discussion

The findings of the present study help fill a void in the literature on stress and adjustment among low-income African-American families. Although African-American families suffer poverty at extraordinary levels, and although poverty is linked to the experience of stressful events and experiences, little research has examined how stressful events experienced in the family are associated with African-American adolescents' functioning.

Table 2
Association of Stressful Events and Family Organization with Adolescents' Adjustment

Predictor Variable	Dependent Variable			
	SR	PB	PD	SE
Family Organization (FO)	.05	.10	.05	.12
Disruption (D)	-.44*	.40+	.29	-.52*
Work Stress (WS)	.01	-.12	.01	.02
Health Problems (HP)	-.34*	.40*	.34*	-.39*
Relationship Problems (RP)	.09	.10	.07	.04
Income (I)	.33*	-.32*	.14	.09
FO X D	.22	.08	-1.65**	.27
FO X WS	.26	.01	1.03	.13
FO X HP	.30	.29	.26	.17
FO X RP	.17	.17	.08	-.17
FO X I	-.03	-.02	.06	.22

Note: Regression coefficients are standardized (betas).

Self-reliance (SR), problem behavior (PB), psychological distress (PD), self-esteem (SE).

+ $p < .10$

* $p < .05$

** $p < .01$

The findings revealed that the more that families experienced disruption and the more that mothers reported health problems, the lower adolescents' self-reliance and self-esteem. Also, mothers' health problems were linked to an increase in adolescents' problem behavior and psychological distress. When families face disruption or the poor health of a significant member of the family, adolescents may be required to relinquish some of their self-reliance or independence in order to help with family matters. The stress associated with negative experiences as well as the possible changes in behavior required of them (lower self-reliance or independence) may also be associated with lower self-esteem and high psychological distress in the adolescents. The positive association between health problems and adolescents' problem behavior may indicate that when mothers' health is compromised, control and monitoring of adolescents' behavior may suffer and adolescents may engage in problematic forms of behavior. Indeed, past research (McLoyd et al., 1994) has shown that the effects of economic stressors on adolescents' functioning are mediated by mothers' parenting behavior. Clearly, the processes mediating the association between stressful events and adolescents' adjustment need investigation.

Our findings revealed some evidence of the moderating effects of family organization on the association of stressful events with adolescent adjustment. The results revealed that in homes high in organization an increase in disruption was associated with lower psychological distress, while in homes low in organization increases in disruption were associated with an increase in psychological distress. In highly organized homes, the stability and structure of the family environment may offset the impact of disruptive experiences like a move or the loss of a family member. In organized homes facing disruption, because some aspects of family life remain predictable, adolescents may find the disruptive experiences less distressing. The routines and organization of the family may be the "calm in the eye of the storm" for adolescents.

The question of why family organization moderates the effects of disruption but not other stressful experiences is unclear. It may be that work-related stressors are removed far enough

from adolescents that they have limited association with youngsters' functioning and need little moderation. It may also be that problems in relationships are emotionally charged enough that little moderation of their effects are possible through factors such as family organization.

There are several limitations in the research that should be noted when interpreting the results. First, the data were based on self-reports of the mothers and adolescents. Objective observers beyond mothers might report more or less stressful experiences. Also, reporters other than adolescents might characterize family organization differently. However, it was expected that mothers are likely the best source of information about stressors which they or their family members have experienced. Also, research has shown that adolescents are accurate reporters on family processes (e.g., Schwarz, Barton-Henry, Pruzinsky, 1985).

Second, the use of interviews with mothers and adolescents as the sole source of data introduces another potential limitation. It is possible that relations found were the result of shared method variance involved in the measures (Bank, Dishion, Skinner, & Patterson, 1990; Lorenz, Conger, Simons, Whitbeck, & Elder, 1991). A multiple method and multiple informant strategy would help overcome this problem. Thus, the relations found must be interpreted with caution.

Third, the causal direction in the relations among the variables is uncertain. For example, given the design of the investigation, it is not possible to tell whether family disruption leads to lower self-reliance among adolescents, or whether adolescents who are less self-reliant cause some of the disruption in the home. Longitudinal data are needed to assess the causal direction among the relations of the variables.

Finally, the sample was composed of economically disadvantaged, urban African-American mothers and adolescents. The results may not generalize to non-poor African-American families living in rural or suburban areas, or to adolescents of other racial or ethnic backgrounds.

Additional research is needed on the effects of stressful experiences on poor African-American and other disadvantaged groups. Indeed, for example, Puerto Rican families suffer

from levels of poverty similar to and sometimes exceeding that of African-American families in some urban areas. It seems highly likely that these families would be exposed to stressful experiences and the effects on their adjustment and possible moderators need investigation. A potential moderating variable for both African-American and Latino families is the support of extended family members. Indeed, the positive effects of kinship support on adolescent adjustment and parents' parenting practices in African-American (Taylor, Casten, & Flickinger, 1993; Taylor & Roberts, 1995; Taylor, 1996) and recently Puerto Rican families (Taylor, 1997) has been shown. The question of whether social support from the extended family also offsets potential negative effects of stressors is an important question. It is also important to assess whether other potential sources of support in communities (religious organizations) help moderate the effects of stressful experiences on families. Given the significant and consistently high levels of poverty experienced among ethnic minority families in the United States, it is imperative to identify factors within and beyond the family that may offset the impact of stressors linked to poverty.

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The Laboratory for Student Success

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